"When I think of excellence, I think of people more than things because only people can bring quality, excellence, perfection to things that must work. It is in that light that we achieved the Apollo landings on the Moon."

-GEORGE M. LOW

GEORGE M. LOW AWARD / 2005

Nomination Guidelines

National Aeronautics and Space Administration Washington, DC

March 2005

NASA's Quality and Excellence Award

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George M. Low Award Trophy Inscription

This trophy is awarded in the memory of George M. Low, who greatly contributed to the early development of NASA space programs during his 27 years of Government service.

The medallion that is embedded in the shape of an Apollo Command Module has alloyed in it a portion of an artifact flown to the Moon and back on Apollo 11—the first manned lunar landing mission on July 16–24, 1969.

Established in 1985 as the NASA Excellence Award for Quality and Productivity, the George M. Low Award is the United States' senior award for organizational quality and excellence.

GEORGE M. LOW was dedicated to quality and excellence. His career and achievements spanned many fields—space science, aeronautics, technology, and education. As an engineer, mathematician, scientist, NASA Director and Deputy Administrator, Chairman of the National Research Council, and President of Rensselaer Polytechnic Institute, his achievements were legendary. In the space program, he provided management and direction for the Mercury, Gemini, Apollo, and advanced piloted mission programs.

George M. Low advanced through NASA management on the strength of his extraordinary quality-embedded achievements. His progress to prominence made him a role model in the sight of all with whom he came in contact. He was a man with a vision—a vision shared by many who also dreamed that America should lead the way in astronautics and aeronautics. George M. Low stretched the boundaries of excellence; by his example, others are motivated to do the same.

For additional information, contact:

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2005 George M. Low Award

Nomination Guidelines



I. Purpose

The George M. Low (GML) Award is NASA's premier quality and performance award for NASA's prime contractors and subcontractors. The presentation of the GML Award signifies NASA's recognition that the award recipient has demonstrated excellence and outstanding technical and managerial achievements in quality and performance.



II. Nomination Responsibilities

Mission Directorates

- Annually, the Mission Directorates call for GML Award nominations from the NASA Centers.
- The Mission Directorates will assure that all nominations from the Centers fully comply with the eligibility requirements and nomination specifications outlined in this booklet.
- Mission Directorates may submit one nominee from a Mission Directorate contract or agreement.

Centers

- · Centers will nominate candidates for the GML Award.
- Prior to submitting nominations to the Mission Directorates, Centers must forward, via e-mail, a list of the companies they wish to nominate to the other Centers along with a brief justification for the nomination. The other Centers should provide any appropriate information to the nominating Center concerning the merit of the nominations prior to the nominating Center recommending a nominee to their respective Mission Directorate.
- In the event that more than one Center plans to nominate a contractor that has contracts with multiple Centers, the Centers must select a lead Center that will submit the nomination with inputs from the other Centers. This fact must be noted in the lead page, as defined in Section III, Format Requirements.
- Each Center shall submit no more than one nominee for each category. Nominations will be submitted to the respective Center's managing Mission Directorate. Centers also are encouraged to have at least 50 percent of their nominations be either a small business or a subcontractor of a NASA prime contractor.

Mission Support Offices

- Mission Support Offices may nominate one small and one large business candidate.
- Mission Support Offices' nominations will be submitted to the GML Award Program, ATTN: Office of Safety and Mission Assurance, for referral to the Review Council.
- Prior to submittal to the Office of Safety and Mission Assurance, Headquarters Mission Support Offices will assure
 that all nominations comply with the eligibility requirements and nomination specifications outlined in this booklet.
 In addition to 20 hard copies, 1 copy of the nomination sent to the Office of Safety and Mission Assurance must
 be in electronic format.
- The Office of Safety and Mission Assurance will forward the list of proposed nominees to Center quality management associates for input, as appropriate, concerning the merit of the nomination.



III. Format Requirements

- The cover of the nomination (not to exceed one page) will include the following:
 - A brief description of the company;
 - The award category and classification in which the organization is being nominated;
 - Nominating Center (If more than one NASA Center is participating in the nomination, the lead as well as the participating Centers will be noted.);
 - Information demonstrating the company's qualifications for the identified category and classification;
 - The number of employees in the company and the number of employees dedicated to NASA contracts;
 - The full name, title, address, telephone number, facsimile number, and e-mail address of the highest ranking member of the organization for the company's GML Award point of contact or action officer; and
 - A complete list of the company's NASA contracts, their value, and the corresponding NASA Center for each contract. (Companies will be evaluated on the basis of all their NASA contracts.)
- Nominations will be a total of no more than seven pages in length, plus the cover page described above, and a glossary if one is needed. Nomination text and figures will be typed using a minimum font size of 10 points.
- In addition to 20 hard copies, one copy of the nomination sent to the Office of Safety and Mission Assurance must be in electronic format.
- The nomination must follow the sequence and address each of the seven criteria listed in Appendix B—
 Evaluation Factors. If a company does not believe that one of the criteria is germane to its business, a clear reason must be provided.
- · Nominations that do not meet the eligibility and format requirements will not be considered.



IV. Categories and Classifications

GML Awards are presented to one outstanding company in each of the following categories and classifications:

Large Business

Product* Service

Small Business

Product* Service



V. Eligibility Requirements

All NASA prime contractors and subcontractors, in good standing with NASA, are eligible to be nominated for the GML Award. Only one nomination for each independently operating business unit of a company will be eligible (for example, a unit of a corporation that reports to a corporate president). The following requirements must be fulfilled:

Requirements for Large Businesses

- Aggregate NASA-related sales for the previous 3 years should exceed \$1 million, with at least \$250,000 in each of the preceding 3 years, or a minimum of at least 50 percent of total sales that are related to NASA.
- There should be a minimum of 50 employees, or 100,000 labor hours, engaged in NASA-related work for the preceding 3 years.
- · A nominated element of a larger corporation should function as an independently operating, self-sustaining profit center that also adheres to independent financial reporting.

Requirements for Small Businesses (Federal requirements for a small, small disadvantaged, or womenowned small business apply.)

- Aggregate NASA-related sales for the 3 preceding years should exceed \$250,000, or the organization should have a minimum of at least 50 percent of total sales that are NASA related.
- There should be a minimum of 25 full-time employees with at least one-third of the employees engaged in NASArelated work.

^{*} A product can be hardware, software, research, and/or technology development



VI. Process Participants

Review Council

The Review Council is composed of representatives from each Mission Directorate, as well as the Center and Headquarters Mission Support Offices submitting nominations.

The Review Council evaluates the candidates submitted for the GML Award by the Centers and the Headquarters Mission Support Offices to verify eligibility and assess the candidates according to the GML evaluation factors (Appendix B). Then the Review Council will select up to eight finalists, with no more than two in any one category, and forward the results of the selection to the Validation Board Site Visit Team for consideration. Finalists selected by the Review Council receive a site visit.

On a case-by-case basis, without violating the spirit of the GML Award program and by consensus, the Review Council has latitude to deviate from a strict interpretation of the eligibility requirements.

Validation Board Site Visit Team

The Validation Board Site Visit Team is composed of five or more members, including a representative from each Mission Directorate and additional members from the Centers and/or the Headquarters Mission Support Offices. The Chief of Safety and Mission Assurance may select additional members. The Validation Board Site Visit Team conducts onsite visits.

The purpose of the site visit is to allow Validation Board Site Visit Team members to meet the company's management and staff, observe the company's operations, and give company management an opportunity to answer questions and to clarify specific issues that surfaced in the company's nomination.

The site visit will be no more than 1 day. Actual onsite time is 6 hours. The Validation Board Site Visit Team will consist of members of the Review Council and may be organized into large business and small business subteams. In addition, the Center or Headquarters Mission Support Office whose finalist is being visited is encouraged to send a representative to the site visit.

Panel of Judges

The Panel of Judges is composed of the Mission Directorate Associate Administrators,* and the Chief of Safety and Mission Assurance is the chairperson. When Mission Support Office nominees are among the finalists, an Assistant Administrator from a Headquarters Mission Support Office will be appointed as an additional judge. The panel chairperson will report the Panel of Judges' selection of winners to the Administrator for approval.

Consultants

Although they are not members of the Panel of Judges, the Validation Board Site Visit Team, or the Review Council, other NASA offices involved in the acquisition and contract oversight process may be consulted throughout the evaluation process for relevant input. These NASA offices will include, but are not limited to, the Office of the General Counsel, the Office of the Inspector General, the Office of Procurement, the Office of Diversity and Equal Opportunity, and the Office of Small and Disadvantaged Business Utilization.



VII. Selection, Evaluation, and Validation Factors

Selection and Evaluation

Throughout the nomination process, GML Award candidates will be considered according to the following seven nomination factors as they apply to the contractual requirements of the nominee:

- 1. Customer satisfaction and contract technical performance,
- 2. Schedule performance,
- 3. Cost performance,
- 4. Management initiatives responsive to NASA's strategic goals,
- 5. Leadership and continuous improvement,
- 6. Research and development and/or innovative technology breakthroughs, and
- 7. Items of special interest to NASA.

^{*} Mission Directorate Associate Administrators may be included as members of the Review Council, Panel of Judges, or serve in an advisory capacity as needed.

Appendix B contains more detailed information about the evaluation factors and point values that are used to assess a candidate.

Review and Validation of Nominees and Selection of Finalists

- Nominees and finalists are reviewed to ensure they are in good standing.
- The Review Council will select up to eight finalists.
- The Centers will be notified by the Mission Directorates of the Review Council's findings with respect to their nominees.
- Finalists will be notified in writing by the GML Award program manager of their status and asked if they wish to continue in the process. If so, a site visit by the Validation Board Site Visit Team will be coordinated.

Selection of Award Recipients

- Following the site visits, the Validation Board Site Visit Team recommends winners to the Panel of Judges.
- The Panel of Judges selects the winners and submits the results to the Administrator for approval.
- Award winners and finalists will be announced during the 20th Continual Improvement and Reinvention Conference in the spring of 2006.

C

VIII. Awards

- Winning organizations will receive the George M. Low Award Trophy. The Administrator will present the GML Award Trophies at the 20th NASA Continual Improvement and Reinvention Conference in the spring of 2006.
- The Administrator also will present the George M. Low Award Finalist Plaques at the 2006 conference. With the approval of the Panel of Judges, all nonwinning finalists will receive the GML Award Finalist Plaque.
- An award winner is ineligible to be placed in nomination again for a period of 3 years. (The start of the waiting
 period is assumed to begin at the end of the calendar year in which the award was received. For example, if ABC
 Co. won the 2004 GML Award, the 3-year waiting period would be 2005–2007, making the company eligible to
 reapply in 2008.)



Appendix A—Milestone Schedule

April 2005

- 2005 GML Award nomination guidelines are distributed.
- Letter from the Office of Safety and Mission Assurance to the Mission Directorates and Headquarters Mission Support Offices opens the GML Award nomination cycle.

June 2005

- Mission Directorates and Headquarters Mission Support Offices furnish the name of their GML Award action officer to the Office of Safety and Mission Assurance, Kelly Kabiri, on (202) 358-0590, by June 30, 2005.
- Centers assemble nominations and, as appropriate, submit the names of nominees to other Center quality management associates for comment. This activity is particularly important if a nominee has contracts with NASA Centers other than the nominating Center, in order to assure no duplication of effort.

July 2005

- Headquarters Mission Support Offices submit nominations to the GML Award Program, ATTN: Office of Safety and Mission Assurance, by July 30, 2005.
- Mission Directorates receive and review Center nominations, and furnish their nominees' names to the GML Award Program, ATTN: Office of Safety and Mission Assurance, by July 30, 2005.

September 2005

- Members of the Review Council and Validation Board Site Visit Team are selected.
- The Review Council is convened. The Review Council reviews and scores all of the nominations, selects up to eight finalist candidates, and forwards the results of the selection to the GML Award Program, ATTN: Office of Safety and Mission Assurance.

October 2005-January 2006

- Finalists are notified that they will receive a site visit. Acceptance of the visit is voluntary.
- The Validation Board Site Visit Team conducts a 6-hour site visit to each finalist organization.
- The Validation Board Site Visit Team prepares its findings for the Panel of Judges.
- The Panel of Judges selects the GML Award winners, with no more than one in each category/ classification combination (an exception exists for "ties"). The Panel of Judges also determines the companies that will receive a GML Award Finalist Plaque.
- The Administrator approves the selections.

March-April 2006

• The Administrator presents the GML Awards at the 20th NASA Continual Improvement and Reinvention Conference in the spring of 2006.



Appendix B-Evaluation Factors

During the nomination/evaluation/screening process, the Centers and the Mission Directorates will use the following nomination factors and associated objective evidence. Suggested scores for each factor and subfactor have been provided as an additional tool to assist in ranking nominees.

1. Customer Satisfaction and Contract Technical Performance (250 Points)

1.1 Customer Satisfaction (100 Points)

- A. Does the contractor have a process to gauge NASA's customer satisfaction (i.e., the quality, timeliness, and responsiveness of the contractor's products and services), and, if so, does the contractor continually evaluate and improve this process? How effective is this process? (50)
- B. How effectively does the contractor respond and follow up with NASA to build relationships and provide support in times of changing programs, schedules, and costs? (25)
- C. Does the contractor have an effective listening and learning strategy to understand and anticipate NASA's needs? (25)

1.2 Contract Technical Performance and Outcomes (150 Points)

- A. Does the contractor have an effective, formally defined process and management system for generating performance requirements and communicating them throughout the organization? (60)
- B. What is the objective evidence (award fees, other data, or records) that demonstrated NASA's high degree of satisfaction with the contractor's performance in all areas of activity over the past 3 years? (50)
- C. Has the contractor instituted initiatives to improve the performance and outcome of its products and/or services, and, if so, how effective are they? (40)

2. Schedule Performance (150 Points)

- A. What is the contractor's 3- to 5-year history of meeting schedule requirements on contracts? (The length of contracts should be considered. Outstanding results would reflect consistently positive trends.) (90)
- B. How effective is the contractor's process for evaluating, documenting, and distributing schedule requirements? (25)
- C. How responsive has the contractor been to rescheduling, work-arounds, and reprioritized work activities? (35)

3. Cost Performance (150 Points)

- A. For the past 3 or more years, allowing for NASA-initiated changes, are actual costs at or below the estimated contract cost? Provide metrics showing actual costs versus planned costs for the past 3 years. (50)
- B. Does the contractor advise NASA of pending cost changes or cost risks in a timely manner? (25)
- C. What kind of cost-reduction/cost-avoidance record has the contractor demonstrated over the past 3 or more years? What specific initiatives were instituted to accomplish this? (75)

4. Management Initiatives Responsive to NASA's Goals (50 Points)

A. To what extent does the contractor's business plan align with NASA's goals, and how is the business plan deployed throughout the contractor's organization? (50)

5. Leadership and Continuous Improvement (175 Points)

- A. How effectively do the contractor's senior managers involve themselves and their workforce in creating the organization's vision, mission, values, and quality policy? (25)
- B. What are the management tools (i.e., capability maturity models, ISO, Six Sigma, or reengineering) being used to set, track, document, measure, evaluate, and continuously improve processes and performance? (50)
- C. How well does the contractor demonstrate leadership with regard to managing the workforce, fostering teamwork, and developing a high-performing, learning organization? (50)
- D. How well does the contractor benchmark the processes of best-in-class organizations to determine improvement goals and measure progress toward world-class status? (20)
- E. How effective is the contractor in helping its subcontractors/suppliers infuse continual improvement into their processes, products, and services? (30)

6. Research and Development and/or Innovative Technology Breakthroughs (75 Points)

When research and development and/or technology breakthroughs are not part of a businesses' operations, focus should be on innovative management initiatives or activities that make a special contribution to the ability of NASA to accomplish its mission.

7. Items of Special Interest to NASA (150 Points)

This factor addresses core values and areas where NASA places special emphasis, such as the following:

- A. What special safety initiatives (e.g., Dupont-like safety program) does the contractor have in place that would underscore NASA's vital concern with safety of workforce, workplace, product, and service? Is the contractor's safety program management centered? (Does safety information, i.e., goals, performance, and incident information, flow through the normal management chain, as opposed to the safety chain?) Describe the company's safety record over the past 3 years. (75)
- B. Is the contractor an equal opportunity employer? (In this area, other than being an equal opportunity employer, NASA advocates a policy among its contractors to recruit, select, promote, transfer, train, and educate in all job groups without regard to race, culture, sex, age, religion, national origin, and physical and mental handicap, where otherwise qualified.) What are the characteristics of the contractor's workforce diversity? (25)
- C. In what ways does the contractor assist NASA in meeting its goals by providing maximum practicable opportunities for small, small disadvantaged, and women-owned small businesses to participate in NASA programs? Provide metrics for the past 3 years. (25)
- D. What is the contractor's scope of education and outreach programs? How effective are the programs? (25)

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